

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS

Appellant:	Robert D. Horning	<b>Reply Brief</b>
Serial No.	10/673,453	
Filing Date	Sep. 30, 2003	
Group Art Unit	2834	
Examiner	Tamai, Karl I.	
Attorney Docket No.	H0004181-5601	
Title: POLYMER ACTUATOR HAVING A CIRCULAR UNIT CELL		

**REMARKS**

Appellant maintains that the Examiner has failed to establish a *prima facie* case of obviousness with respect to the rejection of claims 1-15 and 22-26 since proper motivation to combine the cited references has not been provided. The mere fact that a prior art reference may be modified as indicated by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

In re Fritch, 972 F.2d 1260, 1266 (Fed. Cir. 1992).

In the Examiner's Answer dated July 6, 2006, the Examiner stated, for the first time, a motivation to combine Horning and Ohnstein. The stated motivation provided by the Examiner with regards to "the use of circular polymer cells" is that "Ohnstein teaches the equivalence of the valve being square or circular (see figures 6a and 7a, and col. 6, lines 5-10). The rejection is proper because it is within the ordinary skill in the art to choose between known equivalents." Examiner's Answer, pg. 5. Despite this assertion, the Examiner has still failed to establish a *prima facie* case of obviousness because the Examiner's assertion does not provide a suggestion or motivation to modify or combine the teachings of Horning and Ohnstein. See MPEP §706.02(j).

The passage cited by the Examiner merely states "A circular embodiment is shown in FIGS. 6a and 6b where a circular *closure plate* 4'" is secured at locations 40, 41, 42, and 43 but otherwise operates very similar to the embodiment of FIGS. 1a, 1b, 2a, and 3a. FIGS. 7a and 7b show the microvalve having a square-shaped *closure plate*

REPLY BRIEF

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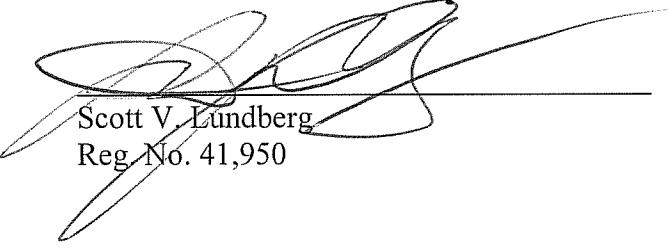
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fastend at the four corners and otherwise being much like the valve described in detail.” Ohnstein col. 6 lines 5-11. This passage merely discusses that “a circular closure plate” “operates very similar” to a “square-shaped closure plate” *in the invention of Ohnstein*. It does not teach or suggest, as apparently asserted by the Examiner, that a square shape and a circular shape are “known equivalents” in other types of actuators, valves, etc. Furthermore, it does not teach that *linear* and *circular* polymer cells are known equivalents nor does it explain why one of ordinary skill in the art would be motivated to modify linear *polymer* cells into circular *polymer* cells based on the *semiconductor* valve of Ohnstein. The combination of Horning with Ohnstein is, therefore, improper and the Appellant respectfully requests that the rejections of claims 1-15 and 22-26 be withdrawn.

For the foregoing reasons, Appellant respectfully requests that the rejections of claims 1-15 and 22-26 be withdrawn.

Respectfully submitted,

Date: 9-1-06

  
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